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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,990	11/24/2003	David G. Peot	10710/213 (PTG 1133 PUS)	3383

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BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER	
ALIE, GHASSEM	

ART UNIT	PAPER NUMBER
3724	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/720,990	PEOT ET AL.	
	Examiner	Art Unit	
	Ghassem Alie	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2002*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *16-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all Obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patent ability shall not be negative by the manner in which the invention was made.

2. Claim 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Gass et al. (2002/0020265), hereinafter Gass, in view of Spychalla (2,674,130). Regarding claim 1, Gass teaches a table saw 1181 including a motor driving a movable cutting tool 40 for cutting workpieces in a cutting region. Gass also teaches a detection system 26 adapted to detect one or more dangerous conditions. Gass also teaches a reaction system 24 associated with the detection system and the cutting tool 40 wherein the reaction system 24 is configured to retract the cutting tool at least partially away from the cutting region. Gass also teaches that the tool upon detection of at least one of one or more conditions by the detection system. See Figs. 5-15 and paragraphs 55-75 in Gass. Gass does not explicitly disclose that the cutting tool retracts independently of the motor and the motor is disengaged from the cutting tool. However, the use of the cutting tool that is retracted independently from the motor is well known in the art such as taught by Spychalla. Spachalla teaches a table saw including a motor 8 driving a movable cutting tool 39, 101. Spachalla also teaches that the cutting tool retracts partially away from the cutting region by an arm 99 independently of the motor. It should be noted that the when the arm 99 is retracted the tension in the belt 110', 110" is diminished, and consequently the cutting tool will not rotate. It should be noted that lowering and lifting of the arm 99 is performed with a help of a screw bolt and a nut.

However, this action could take place by an actuator such as taught by as taught by Gass. See Figs. 1-12 and col. 4, lines 26-75 and col. 5, lines 1-23 in Spychalla. It would have been obvious to a person of ordinary skill in the art to provide Gass' table saw with the driving mechanism that drives the cutting tool without being engaged with the mechanism that vertically moves the cutting tool, as taught by Spychalla, in order to reduce the mass of the cutting tool and facilitated vertical movement of the cutting tool. In addition, rotating the saw by a direct driving mechanism or an indirect driving mechanism produce a same end result, since both driving mechanisms are functionally equivalent. Therefore, it would have been obvious to Gass' direct driving mechanism by the indirect driving mechanism as taught by Spychalla, since both driving mechanism are functionally equivalent.

Regarding claim 2, Gass teaches everything noted above including that the one or more conditions is proximity between a person and the cutting tool. See paragraphs 49-52 in Gass.

Regarding claims 2-7, Gass, as modified by Spychalla, teaches everything noted above including that the motor 80 indirectly drives the cutting tool 39, 101, a belt 110', 110", as taught by Spychalla, to drivingly connect the motor with the cutting tool, and a turnion 12 that carries the motor and the cutting tool. See Fig. 5 in Gass and Figs, 1-12 in Spychalla. Gass, as modified by Spychalla, also teaches that the trunion has a first side, a second side and wherein the cutting tool is mounted on the first side and the motor is mounted on the second side. Gass, as modified by Spychalla, also teaches that a motor shaft extending from the motor to the first side of the turnion 12, an arbor carrying the cutting tool 40, and a drive 35 connecting the arbor and the shaft. See Figs. 5-8 in Gass and Figs. 1-2 in Spychalla.

Regarding claims 8, Gass, teaches everything noted above including that the arbor is movable with respect to a top of the turnion 12. See Figs. 5-8 Gass.

Regarding claim 9, Gass, as modified by Spychalla, teaches everything noted above including that the arbor is in a driving engagement with the motor when the arbor is in a first position such that the cutting tool is in cutting region. See Figs. 1-12 in Spychalla.

Regarding claim 10, Gass, as modified by Spychalla, teaches everything noted above including the arbor is out of driving engagement with the motor when the cutting tool is retracted. See Figs. 1-12 in Spychalla.

Regarding claim 11, Gass teaches everything noted above including a swing arm 1182 pivotally connected to the first side of the turnion near a front of the turnion wherein the swing arm 1182 has a first end and a second end such that the swing arm pivots about the first end. See Figs. 5-8 in Gass.

Regarding claim 12, Gass, as modified by Spychalla, teaches everything noted above including that the swing arm moves independently of the motor. See Figs. 5-8 in Gass and Figs. 1-12 in Spychalla.

Regarding claim 13-15, Gass teaches everything noted above including a restraining mechanism 1199 associated with the first side of the turnion and the second end of the swing arm 1182, wherein the restraining mechanism provides a force to retain the cutting tool in the cutting region. Gass also teaches an actuator 1183 to act on the second end of the swing arm with a force sufficient to overcome the force provided by the restraining mechanism. Gass also teaches a stop 1210 provided on the first side of the turnion such that the swing arm

1183 is in contact with the stop when the when the cutting roll is retracted. See Fig. 8 in Gass.

3. Claim 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spychalla in view of Gass. Regarding claim 1, Spachalla teaches a table saw including a motor 8 driving a movable cutting tool 39, 101. Spachalla also teaches that the cutting tool retracts partially away from the cutting region by an arm 99 independently of the motor. It should be noted that when the arm 99 is retracted the tension in the belt 110', 110" is diminished, and consequently the cutting tool will not rotate. It should be noted that lowering and lifting of the arm 99 is performed with a help of a screw bolt and a nut. See Figs. 1-12 and col. 4, lines 26-75 and col. 5, lines 1-23 in Spychalla. Spychalla does not teach a detection system adapted to detect one or more conditions. Spychalla also does not teach a reaction system associated with the detection system is configured to retract the cutting tool upon detection of at least one or more conditions by the detection system.

However, Gass teaches a table saw 1181 including a motor driving a movable cutting tool 40 for cutting workpieces in a cutting region. Gass also teaches a detection system 26 adapted to detect one or more dangerous conditions. Gass also teaches a reaction system 24 associated with the detection system and the cutting tool 40 wherein the reaction system 24 is configured to retract the cutting tool at least partially away from the cutting region. Gass also teaches that the tool upon detection of at least one of one or more conditions by the detection system. See Figs. 5-15 and paragraphs 55-75 in Gass. It would have been obvious to a person of ordinary skill in the art to provide Spychalla's table saw with the detection and reaction

systems, as taught by Gass, in order to ensure the safety of the operator in the case that operator gets too close to the movable cutting tool.

Regarding claim 2, Spychalla, as modified by Gass, teaches everything noted above including that the one or more conditions is proximity between a person and the cutting tool. See paragraphs 49-52 in Gass.

Regarding claims 2-7, Spychalla, teaches everything noted above including that the motor 80 indirectly drives the cutting tool 39, 101, a belt 110', 110", as taught by Spychalla, to drivingly connect the motor with the cutting tool, and a turnion that carries the motor and the cutting tool. See Figs, 1-12 in Spychalla. Spychalla also teaches that the trunion has a first side, a second side and wherein the cutting tool is mounted on the first side and the motor is mounted on the second side. Spychalla also teaches that a motor shaft extending from the motor to the first side of the turnion, an arbor 98 carrying the cutting tool 39, 101 and a drive 110' connecting the arbor and the shaft. See 1-2 in Spychalla.

Regarding claims 8, Spychalla teaches everything noted above including that the arbor 98 is movable with respect to a top of the turnion. See Figs. 1-2 in Spychalla.

Regarding claim 9, Spychalla teaches everything noted above including that the arbor 98 is in a driving engagement with the motor when the arbor is in a first position such that the cutting tool is in cutting region. See Figs. 1-12 in Spychalla.

Regarding claim 10, Spychalla teaches everything noted above including the arbor is out of driving engagement with the motor when the cutting tool is retracted. See Figs. 1-12 in Spychalla.

Regarding claim 11, Spychalla teaches everything noted above including a swing arm 99 pivotally connected to the first side of the turnion near a front of the turnion wherein the swing arm 99 has a first end and a second end such that the swing arm pivots about the first end. See Figs. 1-12 in Spychalla.

Regarding claim 12, Spychalla teaches everything noted above including that the swing arm moves independently of the motor. See Figs. 1-12 in Spychalla.

Response to Amendment

4. Applicant's arguments filed 08/28/06 have been fully considered but they are not persuasive.

Applicant's argument that that the Examiner does not provide any objective factual evidence that a direct driving mechanism is functionally equivalent to an indirect driving mechanism is not persuasive. As stated above, Spychalla teaches that the cutting tool can be operated with an indirect driving mechanism. Gass teaches that the cutting tool can be driven by a direct driving mechanism. A person of ordinary skill in the art knows that a circular saw either is rotated directly by a driving mechanism or indirectly by a driving mechanism. It is well known in the art that a cutting tool is either directly connected to the drive shaft of a motor or is indirectly connected to the drive shaft of a motor via a belt. In both cases, the end result is the same, since both driving mechanisms rotate the cutting tool or the circular blade. Therefore, selection of any of these known equivalent for driving the cutting tool or the circular saw would be within the level of ordinary skill in the art. In addition, Spychalla teaches that cutting tool is connected to the drive shaft of a motor via a belt. Therefore, it is easier to lift or retract the cutting tool relative to the motor, since the cutting tool does not

carries any additional weight. Spychalla teaches that no additional weight is carried by the cutting tool during the movement of the cutting tool. Therefore, the weight of Spychalla's cutting tool is less than a cutting tool that carries also a motor when it is lifted or retracted. It is obvious to a person of ordinary skill in the art that the cutting tool with no additional weight has less mass than a cutting tool with an additional weight. A person of ordinary skill in the art also knows that lifting a device with a smaller mass is easier than lifting a device with a larger mass. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Gass' table saw with the driving mechanism that drives the cutting tool without being engaged with the mechanism that vertically moves the cutting tool, as taught by Spychalla, in order to reduce the mass of the cutting tool and facilitated vertical movement of the cutting tool.

Applicant's asserted that there is no rational provided for rejection of claims 1-13 over Spychalla in view of Gass. This is incorrect. See item 3 above.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545

(CCPA) 1969. In this case, Spaychalla teaches a circular cutting machine that does not have a safety mechanism. Gass teaches a circular cutting machine that includes a safety mechanism. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Spychalla's table saw with the detection and reaction systems, as taught by Gass, in order to ensure the safety of the operator in the case that operator gets too close to the movable cutting tool.

Applicant's asserted that the rejection based on Spaychalla in combination with Gass is deficient. However, applicant has not provided a single objective reason that indicates the rejection based on Spychalla in combination with Gass is improper or deficient.

Applicant asserted that Spychalla does not teach that when the arm 99 is retracted the tension in the belt 110', 110" is diminished, and consequently the cutting tool will not rotate. See col. 5, lines 1-24 in Spychalla. As arm 99 is retracted the cutting tool also retracts toward the motor. Therefore, the tension of the belt 110', 110' will be reduced or diminished.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

November 11, 2006

BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER